

Spruce Islands Provincial Nature Reserve Interim Management Statement

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Ontario

**Ministry of
Natural
Resources**

**Hon. Vincent G. Kerrio
Minister**

**Mary Mogford
Deputy Minister**



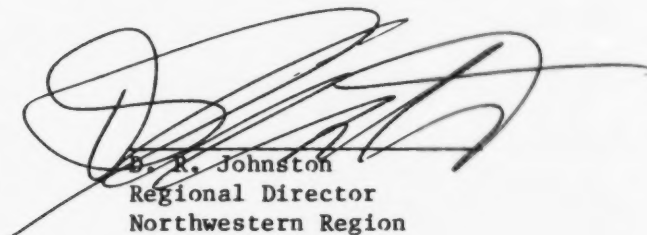
January, 1986

REGIONAL DIRECTOR'S APPROVAL STATEMENT

This Interim Management Statement will provide interim direction for the management of the Spruce Islands Provincial Nature Reserve Park until a comprehensive Park Management Plan is prepared.

This statement will provide the basis for the subsequent preparation of the Park Management Plan.

I am pleased to approve this Interim Management Statement for the Spruce Islands Provincial Nature Reserve.



B. R. Johnston
Regional Director
Northwestern Region

INTRODUCTION

The purpose of this Interim Management Statement is to identify:

- i) park values which are to be protected;
- ii) resource management prescriptions necessary to protect these values; and
- iii) restrictions on use of natural resources within the park.

This Interim Management Statement is not intended to replace a Park Management Plan. Rather it is intended to guide the use of natural resources and related activities within the park until such a time as a Park Management Plan is prepared.

The guidelines that have been developed are based on information contained in the Fort Frances District Land Use Guidelines.

BACKGROUND INFORMATION

NAME: Spruce Islands Provincial Nature Reserve	REGIONAL SETTING MAP
PROPOSED CLASS: Nature Reserve	
M.N.R. DISTRICT: Fort Frances	
M.N.R. REGION: Northwestern	
TOTAL LAND: AREA(ha): 970 ha. WATER:	
SITE REGION: 5S-Lake of the Woods	
SITE DISTRICT: 5S-2	
DATE in REGULATION: 85.01.24	

TARGETS

1 LIFE SCIENCE REPRESENTATION

site type/landscape unit	species/communities
Landscape Unit 31 - Rainy River Clay Plain	- very weakly broken plain of deep to shallow peat overlying clay - water tracks, spruce islands, string patterns and fen pools

2 EARTH SCIENCE REPRESENTATION

geological theme	feature
N/A	N/A

3 CULTURAL RESOURCE REPRESENTATION

theme	theme segment
Unknown	Unknown

4 RECREATION OPPORTUNITIES

day use	car camping	wilderness/back country
N/A	N/A	N/A

INVENTORIES

level	type	earth science	life science	cultural	recreational	other
reconnaissance			1978			
completion date						
detailed						
completion date						
required?		N/A	yes	N/A	N/A	

DATE

MANAGEMENT GUIDELINES

I LAND TENURE

There are presently no forms of alienated land tenure within the park boundary.

Guideline

Requests for any form of land tenure will not be considered.

II LAND ACQUISITION/DISPOSITION

There is presently one patent property located within the park boundary described as follows: N 1/2 of SE 1/4 Section 21 - 32.78 ha. (see attached map). In addition, the park is largely surrounded by patented property.

Guidelines

The Ministry of Natural Resources will not actively seek to acquire the above described patented property pending the completion of the park management plan. The Ministry will however, enter into negotiations should the owner of the above property express an interest in disposing of this property.

The Ministry will attempt to influence the use of private land adjacent to the park when such uses are considered significant to the management of the park.

No further disposition of Crown-owned lands will be considered.

III EXISTING/PROPOSED DEVELOPMENT

There are no existing facilities or developments within the park.

Guideline

Proposals for park development will not be considered pending the completion of the park management plan. Park development will be limited to trails, necessary signage and interpretive facilities for research and educational purposes.

IV RECREATION ACTIVITIES

The only recreational activities that presently occur within the park area are a limited amount of sport hunting and to a lesser extent, wildlife viewing.

Guideline

The above mentioned recreational activities will be permitted to continue.

V COMMERCIAL ACTIVITIES

A portion of one trapline is included within the park boundary.

A small amount of timber has been harvested in the past from isolated patches within the park.

Guidelines

Trapping on the existing trapline will be permitted to continue within the park area. Proposals for trapline cabins will not be considered.

Timber harvesting will not be permitted in the park.

Mineral exploration/extraction will be permitted to continue as per the Fort Frances District Land Use Guidelines. This activity will only be authorized by the issuance of an Exploratory Licence of Occupation under Section 190 of the Mining Act.

Aggregate extraction and the extraction of peat will not be permitted within the park.

VI NATIVE INTERESTS

There are no known Native interests in the park area.

VII NATURAL RESOURCES

A number of natural resource values have been identified to date through the life science inventory. These life science values include for example, tear-drop shaped spruce islands, water tracks, fen pools and string patterning. Management efforts will be directed towards the protection of these features.

VIII CULTURAL RESOURCES

No known cultural resource values have been identified to date.

IX CLIENT SERVICES

Information on the life science values of this nature reserve will be made available to the public in an attempt to foster an understanding and appreciation for this nature reserve.

X RESEARCH

A more detailed life science inventory will be necessary prior to the preparation of the park management plan.

XI MARKETING

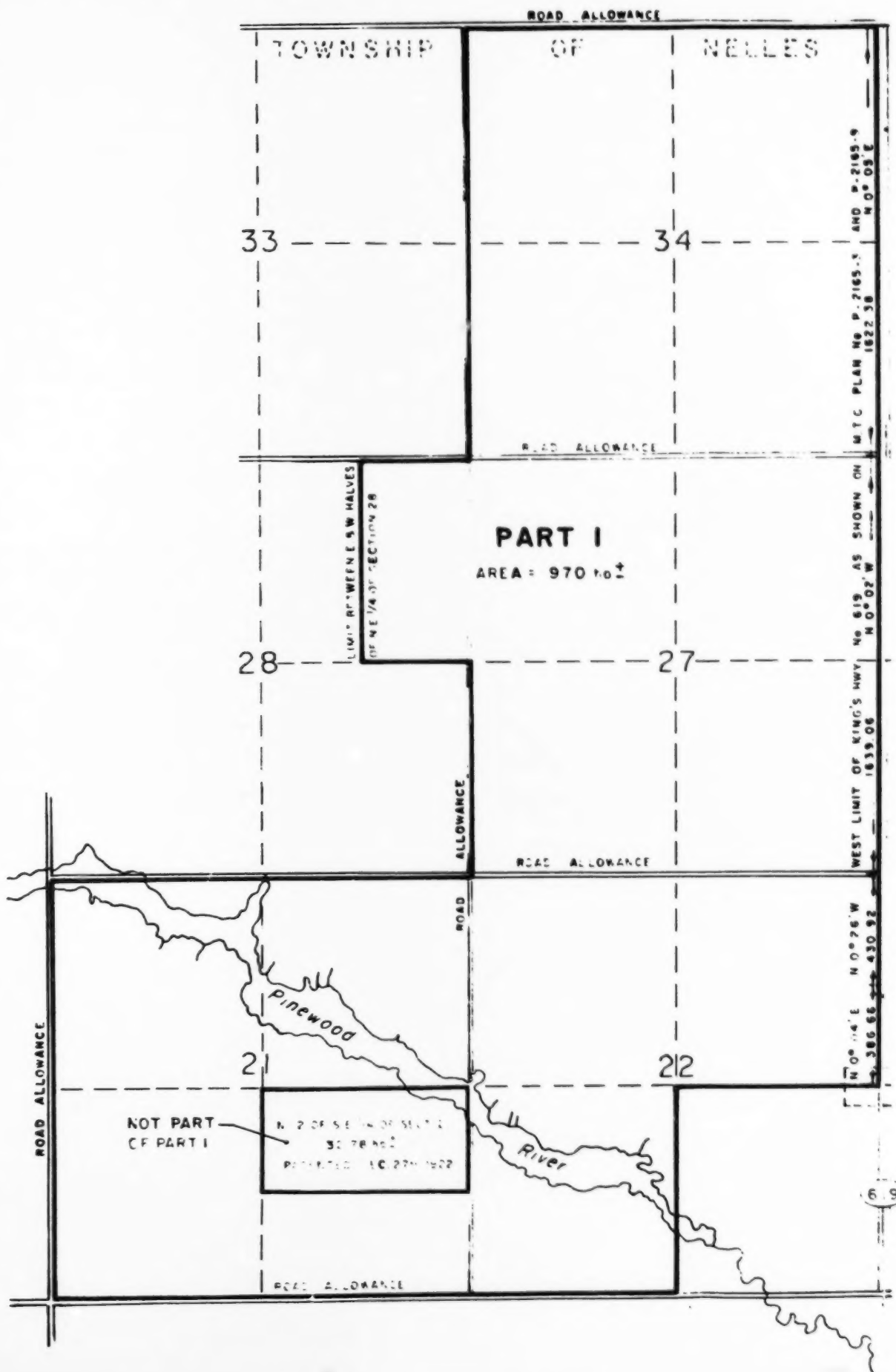
A marketing strategy for this nature reserve class provincial park will be addressed during the preparation of the park management plan.

SOURCES/REFERENCES

NOBLE, T., Life Science Inventory Check-Sheet For Nelles Township
Peatland - B. Spruce Island Section, Ontario Ministry of
Natural Resources, 1978.

Ontario Ministry of Natural Resources, Fort Frances District Land Use
Guidelines, 1983.

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7. NELLES TOWNSHIP PEATLAND

a. Area Description

Area 7 covers approximately 800 hectares west of Highway 619 in Nelles Township. The area is comprised almost exclusively of peatlands.

Area 7 is currently used for commercial fur production from resident traplines, and experiences some hunting for deer and small game. A small amount of timber is harvested from isolated patches of productive forest. The area is characterized by high peat potential and generally low aggregate potential. About sixty percent of Area 7 has moderate mineral potential; the balance has low potential.

Area 7 includes one private property and no permanent dwellings. The area is generally inaccessible by road.

b. Land Use Intent

The area is recommended for park status. The recommended park would provide representation of the swamp, bog and fen communities within landscape unit 31 (Rainy River Clay Plain). Boundaries of the candidate area have been revised so as to exclude lands of significant agricultural potential where these are located

adjacent to areas presently being farmed.

In consideration of existing land uses within Area 7, it is further recommended that most of these uses be permitted to continue. The exception to this would be commercial logging which is not recommended as a continuing use. An outline of those ongoing activities which are recommended for continuation is given in the Land Use Activity section, however it must be realized that further refinement of these recommendations may be required in some instances.

The Land Use Activity section also provides guidelines for how the Ministry will attempt to influence the use of private lands located within the recommended candidate. These guidelines could be refined as more information is gathered concerning the contribution of these lands towards meeting park objectives.

Until such time as the area is established as a park, it will be managed essentially as Crown lands with private land inholdings. Traditional uses of the area will be permitted to continue provided they do not jeopardize long term park objectives, or impact on known park values to the significant detriment of their value once the park is created.

c. Land Use Activity For Area No. 7 - NELLES TOWNSHIP PEATLAND

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Forestry		x	
Hunting	x		It is recommended that existing hunting activities be permitted to continue.
Mining	x		It is recommended that mineral exploration/extraction be permitted to continue.
Provincial Parks	x		Area 7 is recommended for park status.

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Roads		x	
Rural Residential		x	
Sport Fishing		x	
Tourism		x	
Trapping	x		It is recommended that existing trapping activities be permitted to continue.
Wildlife Viewing	x		
Wild Rice Harvesting		x	
Urban Development		x	

ONTARIO NATURE RESERVES PROGRAM - LIFE SCIENCE INVENTORY CHECK-SHEET

NAME Nelles Twp Peatland-B.Spruce Is.Section		MAP NAME Arbor Vitae	MAP NUMBER 52D/16	UTM REF. 030060
COUNTY, DISTRICT or REGIONAL MUNICIPALITY District of Fort Frances		LAT. 48° 48' N	LONG. 94° 18' W	ALT. MIN. MAX. 1108ft. 1120ft.
LOCALITY Rainy River District		1:50,000 N.T.S. MAP SHOWING AREA BOUNDARIES 1:250,000		
TOWNSHIP Nelles Twp				
AREA acres 1800 ha				
OWNERSHIP Crown				
ADMINISTRATION Ministry of Natural Resources				
FOREST REGION AND DISTRICT L.12-Rainy River				
SITE REGION AND DISTRICT 5S-2 Rainy River				
MNR REGION AND DISTRICT NWR-Fort Frances				
CONSERVATION AUTHORITY				
AERIAL PHOTOGRAPHS				
BASE MAP:				
YEAR	ROLL	FLIGHT LINE	NUMBERS	
1965	38	4834	21	
1965	38	4833	161	

PHYSICAL AND BIOLOGICAL FEATURES

The Nelles Township Peatland is a small portion of an extensive nearly continuous peatland area found in the bed of former Glacial Lake Agassiz in the Rainy River area of Ontario, the northwestern corner of the State of Minnesota and the south-eastern corner of Manitoba. This large area of peatland is a distinct biophysio-graphic unit supporting "a remarkable variety of swamp, bog and fen types which include floristically rich forested swamps, bogs supporting productive black spruce -feather moss forests, poor black spruce muskegs, string bogs, patterned fens, and fields of regularly spaced forest 'islands'" (Heinselman, 1963).

The Nelles Township Peatland was identified under the International Biological Programme (1975) and divided into two sections for descriptive purposes, using Hwy. 619 as the dividing line. The resulting two sections were (a) Kishkakoosis (see 52D/16, UTM 065065) and (b) the Spruce Island section.

The Spruce Island section is of exceptional interest as it exhibits excellent 'spruce island' patterning which is a very uncommon occurrence in this site region. The peatland also exhibits a varied and rich association complement as well as patterned fen pools. The spruce islands are the most conspicuous feature of this section. They consist of linear and teardrop-shaped islands of coniferous forest occupying broad water tracks in the peat plain. Their areal extent is quite variable but for

DATA SHEETS ATTACHED		SUMMARY SPECIES LISTS		MAJOR INFORMATION SOURCES	
PHYSICAL DESCRIPTION	☒	PHYSICAL FEATURES MAP	☐	I.B.P., 1975, Ian MacDonald	
VEGETATION SUMMARY	☒	VEGETATION MAP	☐	Heinselman, 1963	
EVALUATION SHEET	☒	BIBLIOGRAPHY	☐		
COMMUNITY DESCRS.	☐	PHOTOGRAPHS	☐		
COMMUNITY COMP. LISTS	☐				

EVALUATION AND PRIORITIES

This area has potential as a candidate nature reserve and was recommended for such in the International Biological Programme (1975).

DATE COMPILED

November 23, 1978

COMPILED

T. Noble

the most part are small. Heinselman (1963) describes such features in Minnesota as ranging from "mere clumps of trees to great spruce muskegs several miles long and one mile wide". The longitudinal axis of these islands parallels the direction of drainage and the tails of the teardrop shaped islands point downslope.

Planning Implications - recommended as a candidate Nature Reserve under the International Biological Programme.

Representation - excellent example of peatland patterns and processes. Best example of black spruce teardrop shaped islands.

- excellent site type and plant community representation.

EVALUATION

52D/16 | 030060

OUTSTANDING ASSOCIATIONS

from I.B.P. checksheet

"this peatland presents an excellent 'spruce island' patterning which is a very uncommon occurrence in this site region; as well, it has a varied and rich association complement"

SIGNIFICANT SPECIES OR FEATURES

1. string patterns
2. 'spruce islands' including 'tear-drops'
3. water tracks
4. fen pools

POTENTIAL DISTURBANCES AND THREATS

A potential threat to the existence of these peatland features is drainage for peat extraction and agricultural expansion.

BRIEF SUMMARY

RECOMMENDATIONS

This area was recommended as a candidate Nature Reserve in the International Biological Programme (1975). This peatland deserves a great deal more detailed study to adequately describe the vegetative patterns and processes that occur here.

030060

The above vegetation descriptions are from the I.B.P. checksheet. The checksheet makes note that it is only a cursory treatment of the vegetation.

PHYSICAL DESCRIPTION

52D/16 | 030060

BEDROCK

PHYSIOGRAPHY

The area consists of a very weakly broken plain of deep to shallow peat overlying clay.

SOILS

Soils are organic and in various states of decomposition. Peat stratigraphy throughout the area is probably variable owing to differences in plant material.

GROUNDWATER

Groundwater conditions range from wet to open water. Open water is associated with fen pools located in the water tracks.

SURFACE WATER

Surface water consists of small pools associated with the water tracks.

SHORES

CLIMATE

The ecoclimate of this organic plain is colder than normal.

DISTURBANCE HISTORY

Past impact has included logging, hunting and fire. Highway 619 bisects the Nelles Township peatlands which no doubt has affected drainage condition to some extent.

FIELD NOTES

FIELD NO.: 7-1

DATE: 1980.07.16

AREA NAME: Spruce Is., Nelles Twp.

LOCATION: 52D/16, 030060, A/P 1965 38 4834 21
1965 38 4333 161

FEATURE: Peatland with Spruce Is. with Sedge Meadow

ABIOTIC COMPONENTS - SLOPE - level

ASPECT -

MICROCLIMATE - normal to colder than normal

DRAINAGE - internal with some broad water tracks

SUBSTRATE - peat

BIOTIC COMPONENTS - VEGETATION COMPOSITION BY STRATUM:

A) TREE - occasional Tamarack in Sedge Meadow
Black Spruce and some Tamarack in Spruce Is.

B) SHRUB - *Kalmia polifolia*, *Betula glandulosa*, *Andromeda glaucophylla*

C) HERB - *Carex* spp., *Rubus acaulis*, *Spiranthes romanzoffiana*,
Drosera rotundifolia, *Lobelia kalmii*, *Sarracenia purpurea*,
Phragmites communis, *Dryopteris cristata*, *Vaccinium vitis-idaea*,
Parnassia glauca, *Solidago* sp., *Eriophorum* sp., *Pogonia ophioglossoides*

D) BRYOID - *Sphagnum* hummocks in meadow

*in Spruce Is., the following species appeared - *Ledum groenlandicum*,
Smilacina trifolia, *Menyanthes trifoliata*, and *Pleurozium* moss.

- FAUNAL NOTES - Gray Jay

INCIDENTAL NOTES - 3 photos - 1 of Rose Pogonia, 2 of Sedge Meadow
Drainage ditch with water flow towards N. end. Some alien, disturbed site plants along bank. Impact does not appear great but cannot be considered of benefit to this area.

**POOR
QUALITY
ORIGINAL**